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Beyond cultural values? Cultural leadership ideals and entrepreneurship

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ABSTRACT

This paper offers a fresh perspective on national culture and entrepreneurship research. It explores the role of Culturally-endorsed implicit Leadership Theories (CLTs) – i.e., the cultural expectations about outstanding, ideal leadership – on individual entrepreneurship. Developing arguments based on culture-entrepreneurship fit, we predict that charismatic and self-protective CLTs positively affect entrepreneurship. They provide a context that enables entrepreneurs to be co-operative in order to initiate change but also to be self-protective and competitive so as to safeguard their venture and avoid being exploited. We further theorize that CLTs are more proximal drivers of cross-country differences in entrepreneurship as compared with distal cultural values. We find support for our propositions in a multi-level study of 42 countries. Cultural values (of uncertainty avoidance and collectivism) influence entrepreneurship mainly indirectly, via charismatic and self-protective CLTs. We do not find a similar indirect effect for cultural practices.

1. Executive summary

Cross-country differences in the levels of entrepreneurship are persistent and cannot be explained by economic factors alone. Researchers and politicians alike have turned to national culture as a possible explanation. Past research has focused on cultural values, the shared ideals and long-term goals of societies, which are also the cornerstone of cross-cultural and international business research. Cultures valuing key aspects of entrepreneurship - such as the willingness to bear uncertainty, and individual competitive actions - were thought to drive entrepreneurship. But despite the intuitive appeal of this assumption, the rapidly growing literature on culture and entrepreneurship is characterized by mixed findings. Some studies find the expected relationships of entrepreneurship with cultural uncertainty avoidance and individualism values, but others find the opposite, and still others that there are no significant relationships.

We suggest that one reason for these mixed findings is the fact that cultural values are very broad and general concepts. Entrepreneurship, however, is a rather specific behavior. We therefore advocate greater focus on those aspects of culture that are more proximal, i.e., conceptually 'closer' to entrepreneurship.

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Building on the insight that entrepreneurs are one important type of leader, we introduce cultural leadership ideals as a relevant, proximal aspect of culture that explains cross-national differences in entrepreneurship. We see culturally shared leadership ideals as an important channel through which more general, distal, cultural values may influence entrepreneurship. Cultural leadership ideals describe culturally shared expectations about the attributes, motives and behaviors of outstanding leaders (House et al., 2004). These ideals influence individuals' evaluations of and support for leaders, mostly automatically. We propose that entrepreneurship will flourish in cultures where cultural leadership ideals align, or 'fit', with entrepreneurial behaviors. Considering the multiple demands that entrepreneurs face when they create and sustain a business, we specifically focus on charismatic and self-protective leadership ideals.

We test our propositions in a multi-level study on over 500,000 individuals across 42 countries. Data come from the Global Entrepreneurship Monitor (GEM) and from the Global Leadership and Organizational Behavior Effectiveness Study (GLOBE). Controlling for confounding factors, we find consistent positive effects of charismatic and self-protective cultural leadership ideals on individual entrepreneurship. Further results support our hypothesis that cultural leadership ideals are a channel through which cultural values, but not cultural practices, influence entrepreneurship.

Our study advances comparative entrepreneurship research where progress has been hampered by a lack of understanding of the mechanisms connecting culture and entrepreneurship, and by a lack of clarity about the types of constructs used to measure culture (Hayton and Cacciotti, 2013). We offer novel insights into how culture influences entrepreneurship, and clarify which aspects of culture are most relevant for entrepreneurship. We introduce cultural leadership ideals as an important cultural driver of entrepreneurship. Entrepreneurs succeed in societies that endorse both charismatic and self-protective leadership ideals. These cultures uniquely enable entrepreneurs to initiate change and mobilize the cooperation of others, as well as to be competitive so as to safeguard their venture and avoid being exploited.

Our study helps to understand the past mixed findings on cultural values and entrepreneurship. It also transcends the discussion on whether cultural collectivism or individualism supports entrepreneurship. We demonstrate that cultural leadership ideals act as a channel through which cultural uncertainty avoidance and collectivism values - but not cultural practices - shape entrepreneurship. This complicates entrepreneurship research by highlighting that different aspects of culture have differential effects on entrepreneurship and that these effects flow through different mechanisms. We also discuss implications of our findings for the cross-cultural leadership literature.

2. Introduction

What makes an entrepreneurial culture? This question has captured the attention of researchers as well as policy makers who view entrepreneurship as a means of stimulating economic growth and job creation. The research is fueled by the observation of persistent cross-country differences in entrepreneurship levels, which cannot be explained by economic factors alone (Freytag and Thurik, 2010). Researchers have turned to cultural values - the shared ideals and long-term goals of societies - to characterize entrepreneurial cultures (Hayton et al., 2002; Krueger et al., 2013). Drawing upon the notion of 'culture-entrepreneurship-fit' (Tung et al., 2007), they expected those cultures that value key aspects of entrepreneurship, such as the willingness to bear uncertainty and individual competitive actions, to enable entrepreneurship. Cultural uncertainty avoidance and individualism values were seen to facilitate entrepreneurship, just as individual entrepreneurs endorse these values (e.g., Noseleit, 2010). An early review of culture and entrepreneurship research found support for these assumptions (Hayton et al., 2002). Yet a more recent review of this growing literature identified mixed findings and concluded "that we can be less confident, rather than more, in the existence of a single entrepreneurial culture" (Hayton and Cacciotti, 2013: 708).

We suggest that such mixed findings are not surprising considering that cultural values are rather distal drivers of specific behaviors such as entrepreneurship. Cultural values are shared ideals that are abstracted from specific behaviors, and may influence them only indirectly (Frese, 2015; Stephan and Uhlaner, 2010). This notion finds support in cross-cultural research, especially the Global Leadership and Organizational Behavior Effectiveness (GLOBE) research program. For instance, the GLOBE CEO study found that cultural values influence CEO leader behaviors indirectly. Cultural values shape cultural expectations and views of ideal leadership, and leaders behave in line with these expectations. In turn, firms perform well when their CEOs' behaviors align with the leadership ideals in their cultures (House et al., 2014).

Entrepreneurs too have been characterized as an important type of leader, i.e. leaders of emerging organizations (Cogliser and Brigham, 2004; Vecchio, 2003). Leadership is a process of social influence to achieve goals (Yukl, 2010). Entrepreneurs need to influence others around them including investors, customers, suppliers and employees to launch and sustain their businesses successfully. Entrepreneurs as owner-mangers are also the main decision makers (strategic leaders) shaping the trajectory of their organizations in line with their goals.

In this paper we build on the insight that entrepreneurs are a type of leader, and suggest that cultural leadership expectations may be an important driver of cross-national differences in entrepreneurship. Importantly, leadership expectations are a more 'proximal' –that is, a more immediately relevant - cultural influence on entrepreneurship than are general cultural values. Thus, we propose a fresh perspective for culture and entrepreneurship research by leveraging insights from cross-cultural leadership theory. Cultures differ in their views of ideal leadership, i.e. in the attributes, motives and behaviors that they believe characterize outstanding leadership. These cultural leadership ideals are also referred to as culturally endorsed implicit leadership theories or CLTs hereafter (e.g., Dorfman et al., 2004). Individuals in a culture, mostly subconsciously, expect their leaders to behave in line with these leadership ideals, and evaluate their leaders accordingly. We propose that entrepreneurship will flourish in cultures where cultural leadership ideals align with entrepreneurial behaviors, or where there is a 'CLT-entrepreneurship fit'.

Using a multi-level study, we test our proposition that cultural leadership ideals are an important aspect of culture influencing entrepreneurship. A multi-level design recognizes that while entrepreneurship is an individual behavior, it is embedded in a cultural, country context. Hence, it is determined by both individual and country-level factors (Welter, 2011; Zahra and Wright, 2011). We also explore whether cultural values act as more distal drivers of entrepreneurship, influencing it indirectly through cultural leadership ideals. Finally, we test whether this path of influence is distinct from how cultural practices impact entrepreneurship.

Our study advances comparative entrepreneurship research, the branch of international entrepreneurship that compares entrepreneurship across national contexts (Jones et al., 2011). We shed light on the 'what' (the constructs used to measure culture) and illuminate the 'how' (the mechanisms through which culture influences entrepreneurship).

First, we introduce cultural leadership ideals as an important yet previously overlooked cultural driver of entrepreneurship. We offer a balanced view and theorize about both the desirable charismatic leadership that is often associated with entrepreneurship and the less desirable self-protective leadership that emerges from non-Western views of leadership. This view considers the potentially conflicting demands that entrepreneurs face, namely, how to initiate change by mobilizing the cooperation of others while also being competitive in pursuing their goals and safeguarding their ventures. Entrepreneurs succeed in those societies that endorse the other-directed charismatic attributes of entrepreneurship while also being able to tolerate some of its more self-protective aspects.

Second, our study helps to make sense of past mixed findings on cultural values and entrepreneurship. We achieve this by distinguishing distal from proximal aspects of culture and by theorizing about the distinct influencing mechanisms through which cultural values and practices relate to entrepreneurship. Thus, we identify CLTs as a channel through which cultural values (but not cultural practices) shape entrepreneurship. This complicates entrepreneurship research by highlighting that different aspects of culture have differential effects on entrepreneurship. It also advances this line of research where progress has been hampered by a lack of understanding about mechanisms and a lack of clarity about the type of constructs that are used to measure culture (Hayton and Cacciotti, 2013).

Our research also adds to the cross-cultural leadership literature. Past research links CLTs to the performance of existing firms (House et al., 2014). We extend it to entrepreneurship with distinct results and offer a parsimonious higher-order factor solution of the six global leadership dimensions identified by GLOBE.

Next, we define entrepreneurship (Section 3.1) and elaborate on CLTs (Section 3.2), before discussing how CLTs link with entrepreneurship (Section 3.3) and cultural values (Section 3.4).

3. Theoretical framework

3.1. Entrepreneurship

Entrepreneurship is typically understood as "new entry", i.e., the creation of a new venture (Gartner, 1989; Reynolds et al., 2005). We focus on entrepreneurs who have created, own, and manage a new venture. High rates of new entrepreneurship may reflect a large number of unsuccessful attempts to launch ventures. Hence it is important to consider the sustainability and persistence of entrepreneurial efforts. This is consistent with the occupational choice definition of entrepreneurs - individuals who choose to work for themselves as opposed to others (Hébert and Link, 1982). In our empirical analyses we test the robustness of our results across indicators of new entry and established entrepreneurship.

3.2. Culturally endorsed implicit leadership theories (CLTs)

CLTs as culture-level concepts build on individual-level implicit leadership theory (Lord and Maher, 1991). Implicit leadership theory suggests that individuals hold belief systems, prototypes, or stereotypes about what constitutes "good leadership". Just as researchers have assumptions and theories about leadership, so do lay people have assumptions and theories about the attributes of outstanding, ideal leaders. These assumptions are largely implicit and often unconsciously held (Lord and Maher, 1991). Past research on implicit leadership theories has focused on leadership within organizations and discusses two mechanisms – legitimation and motivational self-selection – through which they influence the emergence of leaders and leader behaviors.

First, implicit leadership theories influence leader emergence and performance via a *legitimation mechanism* i.e. they legitimize certain leader behaviors, attributes and motivations in the eyes of followers. They act as implicit standards that guide what is regarded to be appropriate, desired, and expected of leaders. Consequently, leaders who display attributes that align with followers' implicit leadership theories are more likely to be accepted by followers and to succeed as leaders (Lord et al., 1984; Lord and Maher, 1991). In sum, individuals are more likely to emerge and succeed as leaders if they demonstrate characteristics that are consistent with the implicit leadership theories held by others around them (Epitropaki et al., 2013; Lord and Maher, 1991; van Gils et al., 2010). This resonates with the findings in entrepreneurship research. A key challenge for starting entrepreneurs is to be seen as legitimate and competent by investors, customers, suppliers etc.; failing to obtain legitimacy can threaten the survival of their start-up efforts (e.g., Delmar and Shane, 2004).

Second, implicit leadership theories also influence leader emergence through a *motivational, self-selection mechanism*. Recent contributions emphasize that implicit leadership theories guide whether individuals regard themselves as potential leaders, and consequently influence their aspirations to become leaders. If individuals perceive that they have attributes that they consider to be desirable in leaders, then they are more inclined to take steps to become leaders, for example by applying for promotion

(e.g., Epitropaki et al., 2013; van Gils et al., 2010). Related research finds that individuals hold implicit theories about entrepreneurs and are more likely to try and start a business if they think they have characteristics that align with these implicit theories (e.g., Gupta et al., 2008).

The GLOBE study extended implicit leadership theory to the aggregate cultural-level, highlighting that individuals' implicit belief systems about ideal leaders are culturally shared (House et al., 2004). That is, there is meaningful variation across cultures, and consensus within cultures, about the attributes of outstanding leaders (Dorfman et al., 2012; House et al., 2004). The consequences of CLTs have received only limited research attention to date, with the exception of Dorfman et al. (2012) and House et al. (2014). They show that CLTs influence CEOs' behaviors, and that CEOs are more effective and perform better when they demonstrate behaviors that align with the CLTs in their culture.

The GLOBE study identified a total of six global leadership dimensions or CLTs: self-protective, autonomous, participative, charismatic, team-oriented, and humane-oriented leadership. Broadly, these dimensions describe the degree to which leaders are expected to be self-focused and competitive (self-protective leadership), to exhibit individualistic attributes (autonomous leadership), to involve others in decision-making (participative leadership), to inspire others with a compelling vision and to expect high performance (charismatic leadership), to be loyal to and care for their team members (team-oriented leadership), and to be supportive and modest (humane-oriented leadership, Dorfman et al., 2004; House et al., 2014). Self-protective and autonomous leadership were newly identified in the GLOBE study as non-Western styles of leadership; while the other CLTs align with existing leadership concepts (Dorfman et al., 2012). Self-protective and also autonomous leadership are mostly seen as inhibiting or neutral factors for outstanding leadership with substantial variation across countries. By contrast, charismatic and team-oriented leadership are viewed as facilitating outstanding leadership across cultures, with less cross-cultural variation. Participative and humane-oriented leadership are generally viewed positively (Dorfman et al., 2004).

In this research we focus on self-protective and charismatic CLTs. As we argue in the next section in detail, we regard these CLTs to be conceptually most closely related to entrepreneurship. In this, we face a dilemma. On the one hand, other CLTs may also be linked to entrepreneurship, although we find the theoretical rationale less compelling. On the other hand, the six CLTs show substantial correlations, which means that multicollinearity renders a joint test of all six CLTs on individual entrepreneurship meaningless. As we illustrate in our robustness checks (Section 5.4), the correlations among the CLTs can be summarized in a clear two-factor solution and our main findings replicate using these factors. The first three CLTs (self-protective, autonomous, non-participative) form one factor, which broadly reflects inward, self-focused leadership – here, leaders are primarily concerned about their own needs, status, and advancement. The second factor (charismatic, team-oriented, humane-oriented) reflects outward-focused leadership, where leaders are proactive and inspire others while building positive relationships. Self-protective and charismatic CLTs are the highest loading CLTs on each factor and arguably capture their essence well.

3.3. Self-protective CLT, charismatic CLT and entrepreneurship

Building on the discussion of legitimating and motivational mechanisms and extending it to CLTs and entrepreneurship, we propose that individuals are more likely to become entrepreneurs in countries where CLTs align with the attributes, behaviors and motives associated with entrepreneurship. Thus we build upon the notion of culture-entrepreneurship fit (Tung et al., 2007), and propose that there is a CLT-entrepreneurship fit, especially for self-protective and charismatic CLTs.

Underlying our hypotheses is the observation that entrepreneurs face multiple and potentially conflicting demands in the creation and management of their ventures. They initiate change by setting up new ventures and in doing so need to mobilize cooperation from others around them, such as investors, customers, suppliers and even employees. At the same time, they also have to engage in less collaborative actions to maintain their independence, i.e. ward off competitors, secure market share, exploit first-mover or intellectual property advantages. These actions help entrepreneurs to realize their personal goals, such as income, independence and reputation, which lead them to start their ventures in the first place. This suggests that entrepreneurs have to be both co-operative and, at least to some degree, self-protective in order to avoid being exploited, thus allowing them to get their ventures started.

One way in which leaders successfully address such potentially conflicting demands of cooperation and competition, balancing other- and self-interest, is through behavioral complexity, which enables them to enact multiple leadership styles simultaneously (Denison et al., 1995; Smith and Lewis, 2011). In relation to our research, this suggests that entrepreneurs may thrive in cultures that legitimize both charismatic and self-protective leadership. Such cultures enable entrepreneurs to draw on a broad behavioral repertoire depending on the situation they face. They allow entrepreneurs to preserve their own interests while also considering those of others in situations such as collaborations. We first characterize self-protective and charismatic CLTs and then the cultures in which they are endorsed before we develop our hypotheses for each CLT.

Self-protective CLT describes self-centered, status-conscious and competitive leadership. The primary concern for such leaders is that their interests are met and that they succeed. They achieve this by carefully and strategically interacting with others, and if necessary by engaging in conflict. Self-protective leaders' readiness to be competitive and to engage in conflicts are paired with face-saving behaviors such that their relationships with others are not badly tarnished (Dorfman et al., 2012; House et al., 2014). Status-consciousness, paternalism and face-saving are leader attributes aligned with self-protective leadership and are seen as more acceptable in Southern and Confucian Asian, Middle Eastern, and also Latin American cultures. In these cultures self-protective leadership is seen as broadly neutral. The same leader attributes are generally frowned upon in the more egalitarian Germanic, Northern European and Anglo cultures, which view self-protective leadership negatively (Dorfman et al., 2004). In the latter cultures, leaders are expected to be approachable, to de-emphasize differences in social status and to consult with their

followers (Brodbeck et al., 2008). Self-protective leadership blends attributes considered typical for individualistic cultures (self-centric, competitive) with collectivistic aspects (status-conscious, face-saving).

Entrepreneurs may be seen as more legitimate in cultures that are relatively more accepting of self-protective leadership since creating and managing a venture emphasizes personal interests and requires competitive behavior.[1] Extant research on entrepreneurial motivations highlights that entrepreneurs primarily seek to attain personal goals such as independence, income and reputation through creating a business (Birley and Westhead, 1994; Carter et al., 2003; Cassar, 2007; Gorgievski et al., 2011; Kolvereid, 1996; for a review Parker, 2009).[2] In many ways, creating and managing a venture requires entrepreneurs to be focused on their own interests as well as on their venture's, and to be willing to face potential conflicts, e.g., when competing with other entrepreneurs for customers and market share. In cultures that regard such self-focused leaders as relatively more legitimate, entrepreneurs are more likely to be able to count on acceptance of such behavior from various stakeholders. Similarly, entrepreneurs would find it easier to access important resources. Funders in cultures where self-protective leadership is relatively more accepted would regard entrepreneurs' competitive behavior and their striving to achieve personal goals as legitimate and competent – since they comply with their notions of ideal leaders – and hence would be more willing to support them. Conversely, entrepreneurs 'fit in' less well in those cultures where the legitimacy of self-protective leadership is very low. Their competitive and self-protective behavior would likely meet with resistance; stakeholders would regard it as inappropriate and 'out of place'.

CLTs also facilitate self-categorization as a leader. Self-protective individuals in cultures that endorse self-protective leadership more strongly may come to see themselves as potential leaders, including leaders of firms. They may thus be more likely to self-select into entrepreneurship, i.e. be motivated to take steps to start a business. In summary,

Hypothesis 1a. Self-protective CLT is positively related to individual entrepreneurship.

Charismatic CLT describes outstanding leaders as being able to inspire and to motivate others, and as expecting high performance outcomes based on firmly held values, integrity, self-sacrifice and vision (Dorfman et al., 2012; House et al., 2014). Charismatic CLT highlights proactive and future-oriented elements of leadership through its emphasis on vision, inspirational motivation and high performance, while creating positive relationships with followers. Across cultures, charismatic leadership is seen as particularly effective and desirable leadership (Den Hartog et al., 1999). It is viewed most positively in Anglo cultures followed by Southern Asian and Latin American cultures, and comparably least strongly endorsed (yet still viewed positively) in Confucian Asian cultures (Dorfman et al., 2004). Charismatic leaders are energetic and provide clear direction through compelling visions of what can be achieved and improved upon in the future. Less charismatic leaders are more present-oriented and are willing to accept the status quo, instead of seeking change, developing new goals, and pushing for better performance.

Entrepreneurship is a proactive and performance-oriented behavior. Thus, the more strongly cultures endorse charismatic leadership, the more likely it is that entrepreneurs are seen as more legitimate. Entrepreneurs take initiative and seek to actively shape their future, often together with others (Frese and Gielnik, 2014; Sarasvathy, 2008). They are also characteristically performance-oriented, driven by strong achievement orientation (Collins et al., 2004; Frese and Gielnik, 2014). The creation of a new firm entails bringing a product or service to market that in some way improves upon existing supply or meets unmet demand to attract customers. Thus, cultures endorsing charismatic leadership provide an environment that aligns well with entrepreneurship. In such cultures, entrepreneurial actions - entrepreneurs' proactive and innovative behavior, their conviction to implement a vision and rally others behind such a vision - are more likely to be expected of leaders. For instance, stakeholders and business partners may be more likely to engage with entrepreneurs (as opposed to larger firms) because they see entrepreneurs' proactive actions as particularly desirable and indicative of leadership competence. Conversely, in cultures where charismatic leadership is less strongly endorsed, entrepreneurs' proactive stance may be disapproved of as being disruptive, and viewed as unduly challenging existing arrangements.

CLTs also facilitate leader self-categorization processes. Thus, proactive and visionary individuals living in cultures that strongly endorse charismatic leadership may be more likely to be motivated to start a business and become entrepreneurial leaders. They are more likely to see themselves as potential leaders. In summary,

Hypothesis 1b. Charismatic CLT is positively related to individual entrepreneurship.

3.4. Cultural values, CLTs and entrepreneurship

A longstanding research tradition conceptualizes cultural values as the core of culture (Hofstede et al., 2004), and this view also dominates comparative entrepreneurship research (Hayton and Cacciotti, 2013). The literature especially associates uncertainty avoidance and individualism-collectivism cultural values with entrepreneurship (Hayton et al., 2002). Uncertainty tolerant

[1] We refer to 'relatively more accepting'. Our interest is not in extreme self-protection, which indeed no culture endorses as desirable CLT, and which would entail taking advantage of others. At moderate levels self-protection is consistent with not being taken advantage of, while low self-protection means holding back on one's own goals and opens individuals up to being exploited by others.

[2] Income can refer to both income for the entrepreneur and his/her family, and self-protective behavior can encompass both (House et al., 2014). Entrepreneurs motivated by other-interest are a minority of entrepreneurs. The 2009 Global Entrepreneurship Monitor separately assessed social and commercial entrepreneurship. The two types showed little overlap and the rates for social entrepreneurship were significantly lower than for commercial entrepreneurship (Stephan et al., 2015; Terjesen et al., 2012 see also Bosma, Schott, Terjesen and Kew, 2016).

cultures are thought to facilitate entrepreneurial risk-taking and innovative actions. Individualistic cultures are seen to support the independent action and proactivity of entrepreneurs that are associated with venture creation (for an alternative view of individualism see, e.g., Tiessen, 1997). Thus, entrepreneurial cultures are commonly believed to value risk-bearing and to embrace uncertainty, innovation, proactivity, and the pursuit of individual as opposed to group interests – just as these attitudes and values are characteristic of entrepreneurs and entrepreneurial action (e.g., Frese and Gielnik, 2014; McMullen and Shepherd, 2006; Noseleit, 2010).

The empirical evidence regarding cultural values has been mixed. An early review concluded in favor of the expected negative relationships between collectivism and uncertainty avoidance values, and entrepreneurship (Hayton et al., 2002). Similarly, De Clercq and colleagues report negative relationships for uncertainty avoidance with entrepreneurship (included as a control in their models, Bowen and De Clercq, 2008; Clercq et al., 2010). Yet, other comparative studies found either no associations of cultural uncertainty avoidance and individualism values with entrepreneurship (Autio et al., 2013) or opposing relationships, such that uncertainty avoidance (not tolerance) was related to entrepreneurship (Hofstede et al., 2004; Wennekers et al., 2007).[3]

In response to these conflicting findings, researchers have suggested that cultural values may influence entrepreneurship only indirectly (Stephan and Uhlaner, 2010) and that we lack research on the mechanisms linking the two (Hayton and Cacciotti, 2013). CLTs may be one such important mechanism. Cultural values refer to abstract ideals describing what is desirable. As such they are general concepts that are not linked to any specific behavior or behavioral domain such as entrepreneurship or business leadership (Frese, 2015). As general ideals, they influence more specific preferences and evaluations of people and objects. This includes notions of ideal leadership as captured in CLTs (House et al., 2014). Compared to abstract values, CLTs are so-called 'domain specific' concepts as they have a specific focus on leadership – and entrepreneurs are one type of leader (Vecchio, 2003). Such 'domain-specificity' is important. As the wider psychometric literature illustrates, better prediction is achieved if the level of specificity of predictors matches that of criteria – referring to the bandwidth-fidelity dilemma (Cronbach, 1950) and the correspondence principle (Ajzen and Fishbein, 1977). Thus, narrower context-specific measures, i.e. measures with greater fidelity such as CLTs, are preferred over broader measures, i.e. those with greater bandwidth, such as cultural values. Supporting evidence exists, for instance, in personnel selection (Chapman, 2007), counterproductive work behavior (Bowling and Gruys, 2010) and attitude-behavior relationships (Armitage and Conner, 2001). Having established in the two previous paragraphs, first, that entrepreneurial cultures are most commonly associated with uncertainty avoidance and individualism-collectivism cultural values, and second, that the effect of cultural values on entrepreneurship may be mediated by CLTs, we now turn to our specific hypotheses.

Uncertainty avoidance cultural values refer to cultures desiring 'orderliness and consistency, structured lifestyles, clear specifications of societal expectations, and rules and laws to regulate uncertain situations' (Sully De Luque and Javidan, 2004: 610). Uncertainty avoidant cultures desire to increase the predictability of future events, which they typically lack in their daily lives (Dorfman et al., 2012). Cultures valuing uncertainty avoidance look for other sources to provide consistency and predictability including strong government. They are to a certain extent willing to trade their voice for more predictability and they accept more authoritarian and more self-focused leaders (Sully De Luque and Javidan, 2004).

Cultures valuing uncertainty avoidance are more likely to regard self-protective CLTs as acceptable, since such leaders may help to increase predictability. Self-protective leadership reduces uncertainty by focusing on leaders' own interests and status. This contrasts with consultative leader behaviors that consider the more uncertain interests of others, and where the process of involving others in decisions means that decision outcomes are less predictable (House et al., 2014). Charismatic leadership on the other hand increases predictability by committing to a long-term vision and clarifying high performance standards. Yet, charismatic leadership may also introduce uncertainty through initiating change processes (Dorfman et al., 2004). Considering these relationships and those with entrepreneurship as posited in H1a and H1b.

Hypothesis 2a. The effects of cultural uncertainty avoidance values on individual entrepreneurship are indirect, positively mediated by self-protective and charismatic CLTs.

Individualism-collectivism cultural values capture the preferred nature of social relationships, especially whether individuals are seen as being more autonomous or more interdependent. In particular, in-group collectivism values refer to the extent to which individuals desire to express pride, loyalty and cohesiveness in their organizations or families (Dorfman et al., 2012; Gelfand et al., 2004). In cultures valuing collectivism, individuals define themselves as part of their immediate groups both in private and work life (family and organizations). These groups are a source of support and influence individuals' decisions. In individualistic cultures, individuals are more loosely connected to their immediate groups and their behavior is less influenced by them.

Cultures valuing individualism (low cultural in-group collectivism values) are more likely to tolerate self-protective leadership. This is because self-protective CLT emphasizes self-focused leadership behavior, which aligns with the emphasis on the individual over group concerns (Dorfman et al., 2004). Yet the relationship may be weak because self-protective leadership also contains attributes that are consistent with collectivism, such as face saving. With regards to charismatic CLT, one might expect a positive association between cultural individualism values and charismatic CLT, given the focus on the leader as the source of agency in charismatic CLT. However, charismatic CLT also characterizes leaders as those who bring others together and inspire them around

[3] In contrast, evidence at the individual-level is more consistent with expectations, indicating that entrepreneurs value individualism and uncertainty tolerance (Hayton and Cacciotti, 2013; Noseleit, 2010).

a vision. This aligns the charismatic CLT more closely with cultural collectivism values. Empirical research supports the latter association (Dorfman et al., 2004). Considering these relationships and those posited in H1a and H1b:

Hypothesis 2b. The effects of cultural in-group collectivism values on individual entrepreneurship are indirect, negatively mediated by self-protective CLTs and positively mediated by charismatic CLTs.

3.5. Cultural values, cultural practices and entrepreneurship

In part response to the mixed findings of research on cultural values, recent comparative entrepreneurship research draws attention to cultural practices (Autio et al., 2013; Stephan and Uhlaner, 2010; Thai and Turkina, 2014). Cultural practices reflect perceptions of typical behavior in a culture. They were introduced by the GLOBE study, which found that cultural values and practices on average correlate negatively (Dorfman et al., 2012; House et al., 2004). While there is still much debate, recent research suggests that cultural values and practices represent different types of norms (cf. norm theory Cialdini and Trost, 1998) and that they influence individual behavior through different channels (Chiu et al., 2010; Frese, 2015). Cultural values represent *injunctive* norms reflecting aspirations of what people in a culture ideally ought to be like (Frese, 2015) – just as CLTs represent ideal images of leaders. Cultural practices are *descriptive* norms providing information on the typical behaviors of most people in a culture (Fischer, 2006; Stephan and Uhlaner, 2010). As perceptions of common behaviors, practices offer individuals easy-to-implement templates for their own actions and often influence behavior tacitly, outside of awareness (Nolan et al., 2008). Consequently, cultural practices have been found to correspond closely to behavior and societal outcomes (e.g., Javidan et al., 2006). Conversely, the influence of values may be more indirect through shaping specific preferences and evaluations, for instance, of leaders. In line with this reasoning, the GLOBE culture and CEO studies found that national cultural values, but not practices, relate to CLTs, which in turn influence leader behavior (House et al., 2004, 2014). Thus we suggest that there is a weaker, if any, mediation effect of CLTs for cultural practices compared to cultural values.

Hypothesis 3. Self-protective and charismatic CLTs mediate the effect of cultural values more strongly than that of equivalent cultural practices on individual entrepreneurship.

Fig. 1 summarizes our multi-level theoretical framework proposing effects of country-level CLTs on individual entrepreneurship (H1a, H1b), as well as the indirect effects of cultural values (H2a, H2b) as opposed to cultural practices (H3).

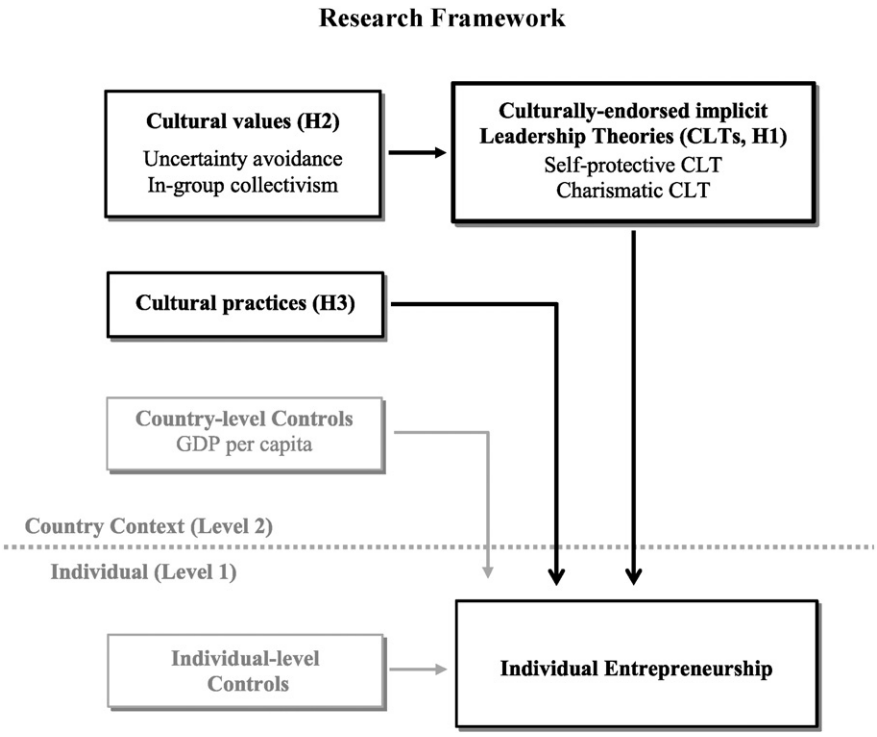

Fig. 1. Research framework.

4. Methodology

4.1. Sample and data

We analyzed data on 560,133 individuals from 42 countries collected annually from 2001 to 2008 through representative surveys of the adult population. These data are publicly available from the Global Entrepreneurship Monitor (GEM) project (Bosma, 2013; Reynolds et al., 2005). We complemented the GEM individual-level data with country-level data on self-protective and charismatic CLTs as well as cultural values and practices drawn from the Global Leadership and Organizational Behavior Effectiveness (GLOBE) study (House et al., 2004). GLOBE data were collected between 1994 and 1997. Our final sample comprised of 42 countries covered in both the GEM and GLOBE studies.

4.2. Individual-level dependent variable: individual entrepreneurship

Our dependent variable is based on the GEM database and is the likelihood of an individual being an entrepreneur (assuming a value of 1 and 0 otherwise). We focus our results first on established entrepreneurs, defined as individuals who are owner-managers of firms that are 42 months old or older. This variable combines aspects of entry and sustainability of entrepreneurship

Table 1
Country-level descriptive statistics.

		CLTs[b]		Cultural values[b]	
Country	Entrepreneurship (in %)[a]	Self-protective	Charismatic	In-group collectivism	Uncertainty avoidance
Argentina	9.00	3.45	5.98	6.15	4.66
Australia	11.54	3.05	6.09	5.75	3.98
Austria	9.91	3.07	6.02	5.27	3.66
Bolivia	22.80	3.83	6.01	6.00	4.70
Brazil	11.52	3.49	6.00	5.15	4.99
Canada	5.37	2.96	6.15	5.97	3.75
China	10.93	3.80	5.56	5.09	5.28
Colombia	13.65	3.37	6.04	6.25	4.98
Denmark	5.59	2.81	6.00	5.50	3.82
Ecuador	14.34	3.62	6.46	6.17	5.16
Egypt	9.74	4.21	5.57	5.56	5.36
Finland	9.28	2.55	5.94	5.42	3.85
France	1.18	2.81	4.93	5.42	4.26
Germany	6.22	2.96	5.84	5.18	3.32
Greece	16.99	3.49	6.01	5.46	5.09
Hong Kong	4.15	3.67	5.66	5.11	4.63
Hungary	5.41	3.24	5.91	5.54	4.66
India	12.47	3.77	5.85	5.32	4.73
Indonesia	22.18	4.12	6.15	5.67	5.23
Ireland	9.76	3.00	6.08	5.74	4.02
Israel	4.14	3.64	6.23	5.75	4.38
Italy	5.31	3.25	5.98	5.72	4.47
Japan	8.89	3.60	5.49	5.26	4.33
Kazakhstan	8.62	3.35	5.54	5.44	4.42
Malaysia	10.01	3.49	5.89	5.77	4.81
Mexico	3.41	3.86	5.66	5.95	5.26
Netherlands	6.87	2.87	5.98	5.17	3.24
New Zealand	11.36	3.19	5.87	6.21	4.10
Philippines	25.80	3.32	6.33	6.18	5.14
Poland	5.46	3.52	5.67	5.74	4.71
Portugal	7.71	3.10	5.75	5.94	4.43
Russia	1.35	3.69	5.66	5.79	5.07
Slovenia	7.41	3.61	5.69	5.71	4.99
South Africa	2.09	3.19	5.99	5.91	4.67
South Korea	11.66	3.67	5.53	5.41	4.67
Spain	8.04	3.38	5.90	5.79	4.76
Sweden	5.06	2.81	5.84	6.04	3.60
Switzerland	10.59	2.92	5.93	4.94	3.16
Thailand	17.51	3.91	5.78	5.76	5.61
Turkey	10.69	3.57	5.95	5.77	4.67
United Kingdom	6.83	3.04	6.01	5.55	4.11
USA	8.04	3.15	6.12	5.77	4.00
Overall %	7.6%	3.37	5.87	5.62	4.49
N	42,768				

Notes: Statistics generated using 560,133 individual-level observations from GEM and 42 countries.
[a] Dependent variable given as percent of the adult population; Source: GEM (42 countries, 2001–2008).
[b] CLTs and cultural values obtained from the GLOBE study.

as discussed in Section 3.1. In our robustness checks, we replicate our findings for measures of entrepreneurial entry that are less affected by survival bias compared to established entrepreneurship. As defined in GEM (e.g., Bosma, 2013), these measures of entrepreneurial entry include entrepreneurial intention (expecting to start a firm in the next 3 years), nascent entrepreneurship (currently in the process of starting a new firm) and new entrepreneurship (being the owner-manager of a new firm that has paid wages in excess of 3 months but is no older than 42 months).

Table 1 provides information on the percent of the adult population identified as entrepreneurs. Since we combine data from 2001 to 2008, we examined the stability of the entrepreneurship indicators at the country-level. We found evidence for substantial stability over time. The average retest-stability was 0.65 for the country-level rate of entrepreneurship.

4.3. Predictor variables at the country-level: CLTs and cultural values

Data on CLTs and cultural values come from the GLOBE study (House et al., 2004). Country scores are displayed in Table 1 for the CLTs and cultural values used in this study. GLOBE surveyed industry-matched samples of over 17,000 managers working in local firms across 62 societies (House and Hanges, 2004). CLTs were measured through a questionnaire, which listed 112 items describing a range of traits, skills, behaviors and abilities associated with leadership emergence and effectiveness (Hanges and Dickson, 2004). Leader attributes were rated 1 through 7, with 1 indicating 'this behavior or characteristic greatly inhibits a person from being an outstanding leader' to a high of 7 indicating 'this behavior or characteristic contributes greatly to a person being an outstanding leader'. Through multi-level confirmatory factor analyses, GLOBE grouped the 112 leader attributes into 21 primary dimensions of leadership, which in turn clustered into six global dimensions of leadership in a second-order factor analysis (Hanges and Dickson, 2004). Self-protective and charismatic CLT are two of these second-order global leadership dimensions.

Self-protective CLT is a global leadership dimension that focuses on ensuring the safety and security of the individual through status enhancement and face saving. It includes five primary leadership dimensions: (a) self-centered, (b) status conscious, (c) conflict inducer, (d) face saver, and (e) procedural. Self-protective CLT showed high reliability Cronbach's Alpha 0.98, ICC(2) interrater reliability 0.93, and meaningful within-country agreement and between-country variation. The ICC(1) scores for the five subscales ranged from 0.14 to 0.29 (Hanges and Dickson, 2004: 137).

Charismatic CLT is another global leadership dimension that reflects the ability to inspire, to motivate, and to expect high performance outcomes from others based on firmly held core values. It includes 6 primary leadership dimensions: (a) visionary, (b) inspirational, (c) self-sacrifice, (d) integrity, (e) decisive and (f) performance oriented. The charismatic CLT dimension showed high reliability Cronbach's Alpha 0.98, ICC(2) 0.95, and meaningful within-country agreement and between-country variation. The ICC(1) scores for the six subscales ranged from 0.14 to 0.19 (Hanges and Dickson, 2004: 134–137).

Cultural values were also taken from the GLOBE study and are known as "should-be" measures (House et al., 2004). The "should-be" formulation resonates with the dominant approach to measuring culture through values, i.e. by asking people what is important and desirable (Inglehart, 1977; Javidan et al., 2006; Schwartz, 1999). It means that values are measured as aspirational ideals of societies (Brodbeck et al., 2008; Dorfman et al., 2004). An example item for uncertainty avoidance values is "I believe that societal requirements and instructions should be spelled out in detail so citizens know what they are expected to do." (Sully De Luque and Javidan, 2004).

Cultural uncertainty avoidance values were measured as the extent to which a society, organization, or group should rely on social norms, rules, and procedures to alleviate the unpredictability of future events (Sully De Luque and Javidan, 2004). Cronbach's Alpha reliability was 0.85, the ICC(2) was 0.96, and there was evidence of within-culture agreement and cross-cultural variation (ICC(1) = 0.38, Hanges and Dickson, 2004). Four items were used to measure this dimension. An example item is "I believe that orderliness and consistency should be stressed, even at the expense of experimentation and innovation".

Cultural in-group collectivism values (henceforth, collectivism) were measured as the extent to which individuals should express pride, loyalty, and cohesiveness in their organizations or families (Gelfand et al., 2004). Cronbach's Alpha reliability was 0.66, ICC(2) was 0.87, and there was evidence of within-culture agreement and cross-cultural variation (ICC(1) = 0.13, Hanges and Dickson, 2004). Four items were used to measure in-group collectivism in the GLOBE study. An example item is "Members of this society should take a great deal of pride in being a member of the society" (Gelfand et al., 2004).

For Hypothesis 3 and robustness checks we include measures of cultural practices of uncertainty avoidance and in-group collectivism obtained from the GLOBE study (House et al., 2004). These are similar to the corresponding cultural values described above, with the exception that respondents describe their culture as they perceive it to be ('as is' formulation, instead of 'should be'). For instance, the example item for uncertainty avoidance practices reads "In this society, orderliness and consistency are stressed, even at the expense of experimentation and innovation" (Sully De Luque and Javidan, 2004).

4.4. Individual- and country-level controls

We controlled for a number of individual-level demographic characteristics obtained from the GEM dataset. Age, gender and education influence the propensity to engage in entrepreneurship (Arenius and Minniti, 2005). Thus, we included as control variables: *age* (in years), *gender* (coded 1 = male, 2 = female) and the *level of education* (five levels: 0 = none; 1 = some primary; 2 = primary; 3 = secondary and 4 = graduate). Exposure to other entrepreneurs and being a business angel have also been linked to individual entrepreneurship (Arenius and Minniti, 2005). Hence, we controlled for an individual's ties with entrepreneurs (1 = the individual knew someone who had started a business within the last two years; 0 = otherwise) and for

business angel (1 = the individual personally provided funds within the past three years for a business started by someone else; 0 = otherwise).

At the country-level we controlled for annual GDP per capita in purchasing power parity USD obtained from the World Bank for the years 2001–2008. We also included GDP squared, which had no significant effect and did not change our results, thus it is not reported.

4.5. Estimation methods

Our data contains 560,133 individuals grouped in 42 countries resulting in a nested or clustered dataset. Hence, we used multi-level (random effect) logistic regressions[4] which allow us to consider country-level and individual-level variables simultaneously and to assess the relative impact of each. The alternative method would be single-level regressions, either (1) at the level of individuals which implies disaggregating cultural variables to the individual-level (e.g., each individual in a country would be assigned that country's score on self-protective CLT); or (2) at the country-level which entails aggregating the information on individual entrepreneurship to the country-level (i.e. country entrepreneurship rates). Both types of single-level regressions involve biases. Individual-level regressions increase the risk of Type 1 errors and biased standard errors. They also ignore the nature of culture as a collective concept (dis-aggregation bias) and the non-independence of observations within a country. Conversely, country-level regressions risk aggregation bias and fail to acknowledge the nature of entrepreneurship as an individual behavior (Hox, 2010; Peterson et al., 2012).

For our data, the likelihood ratio test (Hox, 2010) was significant, suggesting non-independence of observations within countries. Specifically, ICC(1), or rho, indicated that 13% of the total variation in individual entrepreneurship resided at the country-level. This means that substantial amounts of variance in individual entrepreneurship are due to country specific contextual influences (Hox, 2010; Peterson et al., 2012), which supports the use of multi-level regressions. For multi-level regression (Tables 5 and 7), all country-level predictors and control variables were z-standardized across countries, resulting in a common metric (M = 0, SD = 1) and enabling easier interpretation of the results. All individual-level variables entered the regressions unstandardized/un-centered. For the analyses relating cultural values to CLTs (Table 6, also Table 8), single-level regressions at the country-level were appropriate since all concepts were measured and conceptualized at the country-level.

5. Results

Table 2 presents individual-level correlations among all individual-level variables. Table 3 reports the correlations at the country-level among all country-level variables. Some country-level correlations exceeded 0.70, which may signal multicollinearity. Thus, we computed the Variance Inflation Factor (VIF) and tolerance values (Table 4). The highest VIF was 2.20 for the country-level variables included in the main model and 4.52 for the mediation model, suggesting that multicollinearity was not a concern for our analyses (Kutner et al., 2004).

Tables 5 and 7 report multi-level logistic regressions including estimates for the fixed part (estimates of coefficients), the random part (variance component), and model fit statistics. The estimates are reported as Odds Ratios (ORs). ORs greater than one indicate positive associations, ORs less than one, negative associations. Tables 6 and 8 report country-level OLS regressions to relate the cultural constructs to each other as part of the mediation tests.

5.1. Hypothesis 1: effects of CLTs on individual entrepreneurship

Table 5 shows that the CLTs were significantly related to individual entrepreneurship in support of Hypothesis 1a and 1b. A unit standard deviation change in *self-protective CLT* increased the individual-level likelihood of engaging in entrepreneurship by 59% (OR = 1.59; $p < 0.001$). Similarly, a unit standard deviation change in *charismatic CLT* increased an individual's likelihood of engaging in entrepreneurship by 36% (OR = 1.36; $p < 0.001$). The two CLTs jointly explained half of the country-level variance in individual entrepreneurship (51%) after accounting for control variables.[5]

5.2. Hypothesis 2: indirect effects of cultural values on individual entrepreneurship

H2a and H2b were tested in three steps. First, we explored whether cultural values were related to CLTs. Second, we examined whether the strength of the effect of cultural values on entrepreneurship was reduced when CLTs were also introduced in the regression. Third, we tested whether this reduction was significant. These three steps are essential to establish the proposed mediation/indirect effect of distal cultural values via more proximal CLTs on entrepreneurship (MacKinnon et al., 2007).

First, Table 6 reports the results of country-level OLS regressions testing the associations among only the culture-level constructs (cultural values and CLTs). As expected, uncertainty avoidance values were significantly positively related to self-

[4] 'Random effects' means that the intercept can vary randomly across countries to account for the country-level variation in entrepreneurship. We test a random intercepts and not a random slopes model.

[5] Before computing the model shown in Table 5, we conducted a separate regression that included only control variables – both at the individual and at the country-level – and computed the variance components for this model. The proportion of the country-level variance explained by the two CLTs was computed relative to the variance components obtained from this unreported regression.

Table 2
Individual-level correlation matrix.

Variables	M	SD	1	2	3	4	5
1. Individual entrepreneurship	0.08	0.27					
2. Age	42.83	15.33	0.06**				
3. Gender	1.52	0.50	−0.09**	0.03**			
4. Education level	2.18	1.07	0.02**	−0.08**	−0.02**		
5. Ties with entrepreneurs	0.36	0.48	0.10**	−0.16**	−0.11**	0.11**	
6. Business angels	0.03	0.18	0.06**	−0.01**	−0.05**	0.04**	0.14**

Notes: N = 560,133 individuals with the exception of correlations for entrepreneurial intention which are based on 495,838 individuals. M - means, SD-standard deviations. Variables 1, 5 and 6 are coded 0–1, gender is coded 1–2, and education 0–4. All correlations are statistically significant minimum at $^{**}p < 0.01$.

protective leadership. Also as expected, cultural collectivism values were significantly negatively related to self-protective CLTs and positively to charismatic CLTs. This was the case independent of whether GDP was included as a control variable. The only exception was the non-significant relationship of uncertainty avoidance values with charismatic CLT. This step establishes the first link of the indirect/mediation effect.

Second, Table 7 reports analyses regressing cultural values and CLTs on individual entrepreneurship using multi-level logistic regressions. These analyses establish whether the effects of uncertainty avoidance and collectivism values on individual entrepreneurship weaken when self-protective and charismatic CLTs were also included in the regression. This would be indicative of the two CLTs mediating the effects of the cultural values. Table 7 shows first the model that includes only the two cultural values (Model 1), followed by a second model which includes cultural values as well as CLTs as predictors (Model 2).

Third, to formally test the proposed mediation effect, we conducted multi-level mediation tests (Zhang et al., 2009). These tests yield a *t*-statistic based on Freedman and Schatzkin's (1992) methodology. They test whether the drop in the coefficients of distal cultural values on entrepreneurship (as established in step 2, Table 7) is significant when the more proximal mediators (CLTs) are also included in the model. It does so while considering the relationships between cultural values and CLTs (as per Table 6, Models 2 and 4). The detailed computations for the multi-level mediation tests are available from the authors, and are summarized next.

With regard to *uncertainty avoidance* values (H2a), we only tested for a possible mediation of *self-protective CLT*, since charismatic CLT was not significantly associated with uncertainty avoidance values (Table 6). Self-protective CLT significantly mediated the influence of uncertainty avoidance cultural values on individual entrepreneurship ($t = 1.74$, $p < 0.10$, df = 40). The OR for uncertainty avoidance values in Table 7 decreased (from Model 1 to Model 2) and the significance levels dropped, but remained significant, when self-protective CLT was introduced in the regression. This indicates a partial mediation effect.

With regard to *in-group collectivism values* (H2b), we first note that these values showed no strong direct effect on entrepreneurship (Table 7 Model 1). This used to be seen as problematic for establishing mediation, but as MacKinnon et al. (2007) explain, it is no longer the case. This is because requiring a significant effect between predictor and dependent variable substantially reduces the statistical power to detect an existing mediation effect. We proceeded and found support that *self-protective CLT* ($t = 4.18$, $p < 0.001$, df = 40) and *charismatic CLT* mediate the effect of in-group collectivism on individual entrepreneurship ($t = 3.76$, $p < 0.001$, df = 40). In sum, H2a and H2b were supported for collectivism and partially supported for uncertainty avoidance values.

5.3. Hypothesis 3: indirect effects of CLTs and cultural values vs. practices

To compare whether CLTs mediate the effects of cultural values more strongly than those of the equivalent cultural practices, we first had to establish that these cultural practices influence the two CLTs via a country-level OLS regression (Table 8). As described in Section 5.2 step 1, for mediation to exist, a relationship between the predictor and the mediator needs to be established as a starting point. This was not the case for the two cultural practices. They were not significantly related to self-protective and

Table 3
Country-level correlation matrix.

Variables	M	SD	1	2	3	4	5	6	7
1. Established entrepreneurship	0.08	0.27							
2. GDP per capita (USD)	28,119	13,962	−0.37*						
3. Self-protective CLT	3.37	0.38	0.36*	−0.73**					
4. Charismatic CLT	5.87	0.29	0.41**	0.03	−0.11				
5. Uncertainty avoidance values	4.49	0.61	0.35*	−0.81**	0.82**	−0.09			
6. In-group collectivism values	5.62	0.35	0.19	−0.34*	0.08	0.38*	0.30+		
7. Uncertainty avoidance practices	4.18	0.62	−0.28+	0.66**	−0.64**	−0.04	−0.73**	−0.35*	
8. In-group collectivism practices	5.06	0.69	0.39*	−0.81**	0.74**	−0.08	0.83**	0.24	−0.73**

Notes: $N = 42$ countries. M – means, SD-standard deviations. Individual entrepreneurship has been aggregated to the country-level to represent rates of entrepreneurship (percent entrepreneurs in the population); $^{**}p < 0.01$, $^{*}p < 0.05$, $+p < 0.10$.

Table 4
Multicollinearity tests for country-level variables.

Variables	VIF	Tolerance
Multicollinearity test for main model		
1. GDP per capita, USD	2.18	0.46
2. Self-protective CLT	2.20	0.45
3. Charismatic CLT	1.02	0.98
Multicollinearity test for mediation model		
1. GDP per capita, USD	3.11	0.68
2. Self-protective CLT	3.71	0.73
3. Charismatic CLT	1.22	0.18
4. Uncertainty avoidance values	4.52	0.78
5. In-group collectivism values	1.57	0.36

Notes: Scores generated with 42 observations. Our variables do not suffer from multicollinearity. None of the VIF scores are above 5 and none of the tolerance scores <0.10.

charismatic CLTs, while the corresponding cultural values showed significant relationships with both CLTs (Table 8). Thus H3 is supported.

5.4. Robustness checks and further results

We conducted seven tests of the robustness of our results. The full results are available on request from the authors.

First, we replicated our results for indicators of entrepreneurial entry (nascent and new entrepreneurship) and entrepreneurial propensity (entrepreneurial intention) as defined by GEM. CLTs were significantly and positively related to nascent and new entrepreneurship and to entrepreneurial intentions. Wald-tests for coefficient differences revealed that the relationships with the two CLTs were of similar strength for intention, nascent, new and established entrepreneurship. Self-protective and charismatic CLT explained about half of the country-level variation of each entrepreneurship indicator (42 to 51%). These findings were also replicated when we conducted a multi-level multinomial regression operationalizing the dependent variable as an ordered categorical variable that combined the four indicators (0 = no entrepreneurial engagement, 1 = entrepreneurial intentions, 2 = nascent, 3 = new, and 4 = established entrepreneurship).

Table 5
Effects of CLTs on individual entrepreneurship[a].

	Individual entrepreneurship
Fixed effects estimates	
Individual-level	
Age	1.02*** (0.00)
Gender (1 = male baseline)	
Female	0.52*** (0.01)
Education level (0 = none baseline)	
Primary	1.67*** (0.17)
Some secondary	1.75*** (0.18)
Secondary	1.87*** (0.19)
Graduate	1.97*** (0.20)
Ties with entrepreneur	1.98*** (0.02)
Business angel	1.56*** (0.03)
Country-level	
GDP per capita, USD	1.46*** (0.03)
Self-protective CLT	1.59*** (0.13)
Charismatic CLT	1.36*** (0.10)
Random parameters	
Number of individuals	560,133
Number of countries	42
Variance component	0.40
% country-level variance explained by CLTs[b]	51
Model fit statistics	
Degrees of freedom	11
Prob > Chi-squared	***
Log likelihood	−140,440
Likelihood ratio test vs. single-level regression[c]	***

Notes: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, +$p < 0.10$ (two-tailed).

[a] Estimates represent Odds Ratio (OR). OR > 1 represents a positive and OR < 1 a negative relationship. Standard errors are shown in parentheses;

[b] In unreported analyses, we first calculated the variance components for the model without the two CLTs, i.e. the model with only controls. The percentage decrease in the values of the country variance components when the CLTs were added yielded the proportion of the remaining variance explained by the CLTs after all controls had been accounted for.

[c] Statistical significance of the Likelihood Ratio test indicates that a multi-level regression model is preferred.

Table 6
Effects of cultural values on CLT[a].

	Self-protective CLT		Charismatic CLT	
	Model 1	Model 2	Model 3	Model 4
Uncertainty avoidance	0.60***	0.53***	−0.09	−0.13
	(0.06)	(0.09)	(0.06)	(−0.05)
In-group collectivism	−0.22*	−0.26*	0.32**	0.29*
	(0.10)	(0.12)	(0.11)	(0.37)
GDP per capita, USD		−0.00		−0.00
		(0.00)		(0.00)
Number of observations (countries)	42	42	42	42
F-test	50.33	33.91	3.90	2.70
p-Value (F-test)	***	***	*	+
R-squared	0.72	0.72	0.16	0.17
Adjusted R-squared	0.70	0.70	0.12	0.11

Note. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, +$p < 0.10$ (two-tailed).
[a] This table is based on OLS regressions and displays standardized regression coefficients and their standard errors in parentheses based on country-level regression (N = 42).

Second, we conducted a robustness check to ensure that the significance levels of the main effects of the two CLTs were not driven by the large number of observations alone – 560,133 individual responses. We used the *sample* command in Stata. It allows the random sampling and retaining of a given percentage of the total number of observations while still clustering them across the 42 countries included in our study. We retained samples ranging from as low as 1% (N = 5601) to 100% of the full sample. There was no loss of generalizability in results for samples that retained >1% of the full sample.

The third robustness check concerned the CLTs. Guided by our theorizing, we tested the association of two of the six global CLT dimensions identified in the GLOBE study. Including all six CLTs in one regression was not meaningful due to the high inter-correlations among the dimensions, raising multicollinearity concerns. We followed Stephan and Uhlaner's (2010) approach of handling multicollinearity in conceptually closely related country-level constructs, and conducted a country-level factor analysis of the six CLTs. We found a clear two-factor solution – i.e. the six CLTs loaded distinctly on two factors. The charismatic, team-oriented and humane-oriented CLTs all loaded positively on the first factor, with a Cronbach's Alpha of 0.74 when these three

Table 7
Effects of cultural values and CLTs on individual entrepreneurship[a].

	Individual entrepreneurship	
	Model 1	Model 2
Fixed effects estimates		
Individual-level		
Age	1.02*** (0.00)	1.02*** (0.00)
Gender (1 = male baseline)		
Female	0.52*** (0.01)	0.52*** (0.01)
Education level (0 = none baseline)		
Primary	1.68*** (0.17)	1.68*** (0.17)
Some secondary	1.75*** (0.18)	1.75*** (0.18)
Secondary	1.87*** (0.19)	1.87*** (0.19)
Graduate	1.97*** (0.20)	1.97*** (0.20)
Ties with entrepreneur	1.98*** (0.02)	1.98*** (0.02)
Business angel	1.57*** (0.03)	1.57*** (0.03)
Country-level		
GDP per capita, USD	1.46*** (0.02)	1.46*** (0.02)
Uncertainty avoidance	1.58*** (0.17)	1.34 + (0.24)
In-group collectivism	1.06 (0.12)	0.93 (0.09)
Self-protective CLT		1.30 + (0.18)
Charismatic CLT		1.38*** (0.11)
Random parameters		
Number of individuals	560,133	560,133
Number of countries	42	42
Variance component	0.56	0.37
Model fit statistics		
Degrees of freedom	11	13
Prob > Chi-squared	***	***
Log likelihood	−140,447	−140,439
Likelihood ratio test[b]	***	***

Notes: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, +$p < 0.10$; 2-tailed significances.
[a] Estimates represent Odds Ratios (OR). OR > 1 represent a positive relationship, whereas OR < 1 represent a negative relationship. Standard errors are shown in parentheses.
[b] Statistical significance of the Likelihood Ratio test indicates that a multi-level regression model is preferred.

Table 8
Effects of cultural values and practices on CLT[a].

	Self-protective CLT		Charismatic CLT	
	Model 1	Model 2	Model 3	Model 4
Uncertainty avoidance values	0.42***	0.37**	−0.12	−0.18
	(0.10)	(0.11)	(0.12)	(0.13)
In-group collectivism values	−0.21*	−0.26*	0.33**	0.28*
	(0.11)	(0.11)	(0.12)	(0.13)
Uncertainty avoidance practices	−0.06	−0.07	−0.05	−0.07
	(0.09)	(0.08)	(0.10)	(0.10)
In-group collectivism practices	0.09	0.06	−0.01	−0.02
	(0.09)	(0.09)	(0.11)	(0.11)
GDP		−0.00		−0.00
		(0.00)		(0.00)
Number of observations (countries)	42	42	42	42
F-test	23.83	18.99	2.20	1.81
p-Value (F-test)	***	***	+	+
R-squared	0.72	0.73	0.19	0.20
Adjusted R-squared	0.69	0.69	0.10	0.09

Note. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, +$p < 0.10$ (two-tailed).
[a] This table is based on OLS regressions and displays standardized regression coefficients and their standard errors in parentheses based on country-level regression (N = 42).

CLTs were combined into one scale. This factor arguably reflects *outward-oriented, other-focused leadership*, where leaders are expected to proactively inspire others while being sensitive to and building positive relationships. Self-protective and autonomous CLTs loaded positively, and participative CLT negatively, on the second factor (Cronbach's Alpha 0.70). This factor (self-protective, autonomous and non-participative) reflects *inward-oriented, self-focused leadership.* The primary concern of such leaders is for their own needs, status, and advancement, potentially to the detriment of others. Next, we computed the factor scores and replicated the analyses in Table 5. In support of our main results, both factors were positively associated with individual entrepreneurship.

The fourth robustness check concerned the entrepreneurial leadership CLT proposed by Gupta et al. (2004), the 'GMS' measure hereafter. The GMS measures and the charismatic CLT correlated at $r = 0.96$, $p < 0.001$, N = 42 countries, suggesting that they capture the same construct. There was no significant correlation of GMS with self-protective CLT $r = -0.20$ n.s. N = 42. Consequently, we could fully replicate the findings shown in Table 5 when we substituted the GMS measure for charismatic CLT. We prefer the original GLOBE charismatic CLT over the GMS measure, since the GLOBE CLT measures have been validated against a range of criteria, unlike the GMS measure. Except in the present study, neither measure has previously been related to individual entrepreneurship.

Fifth, we replicated the significant positive effects of self-protective and charismatic CLTs when controlling for *cultural practices*. We estimated the multi-level regressions as shown in Table 5, adding cultural practices of uncertainty avoidance and in-group collectivism as country-level control variables.

Sixth, we explored potential *curvilinear effects* for self-protective and charismatic CLTs by including a squared term for each CLT in our regression (inspired by Bullough et al., 2014). There were no significant curvilinear effects.

Seventh, we tested, but found no support, for an *interaction effect* of self-protective and charismatic CLTs on entrepreneurship in addition to their direct effects. This may be because hardly any countries in our data set scored low on both CLTs.

6. Discussion

This paper investigated the cultural drivers of individual entrepreneurship in a multi-level study of 42 countries. We find that cultures' conceptions of ideal leadership, or culturally endorsed leadership theories (CLTs), matter for entrepreneurship. We see more entrepreneurship in cultures that view self-protective and charismatic leadership as relatively more desirable. These findings replicate across checks for methodological and substantive robustness, including across different measures of entrepreneurship (entrepreneurial intention, nascent, new, and established entrepreneurship). We also find support for our proposition that CLTs are more proximally relevant to entrepreneurship as compared to general cultural values, which influence entrepreneurship more distally. Self-protective and charismatic CLTs partially mediate the effect of the cultural values of uncertainty avoidance and collectivism on entrepreneurship. As predicted, there was no similar indirect effect for cultural practices.

Understanding how culture influences entrepreneurship is significant for both theory and empirical research on entrepreneurship around the world. Entrepreneurial action is embedded in culture. Understanding *what* aspects of culture are relevant for individual entrepreneurship, and *how* (through which mechanisms they operate), can help to contextualize entrepreneurship theories. This is important if entrepreneurship research is to move beyond its still dominant focus on North America and Europe. We advance and complicate theorizing on how culture influences entrepreneurship. First, we introduce cultural leadership ideals as important yet previously overlooked aspects of national culture that explains substantial variation in entrepreneurship across countries. Second, our study helps to make sense of past conflicting findings regarding cultural values in two ways: it distinguishes distal from proximal aspects of culture; and highlights that cultural values and practices influence entrepreneurship

through different and distinct mechanisms. In addition, our study has implications for cross-cultural leadership research by extending it to entrepreneurship. Next, we elaborate on our contributions and specific findings.

6.1. Implications for comparative entrepreneurship research

6.1.1. Cultural leadership ideals as a new perspective

This study contributes to comparative entrepreneurship research by advancing the understanding of the informal institutions that underlie the stable cross-country differences in entrepreneurship rates. We introduce and theorize CLTs as an important and domain-specific, yet so far unexplored, aspect of national culture relevant for entrepreneurship research by building on cross-cultural and implicit leadership theory (House et al., 2004; Lord and Maher, 1991), and considering entrepreneurs as leaders (e.g., Vecchio, 2003). Self-protective and charismatic CLTs are relevant and robust country-level drivers of entrepreneurship, explaining about half of the country-level variation in individual entrepreneurship.

Self-protective and charismatic CLTs were both positively related to individual entrepreneurship. Charismatic leadership is strongly endorsed across cultures and is seen as wholly desirable. However, self-protective leadership is generally viewed more negatively, i.e. either as inhibiting effective leadership or as 'neutral'. The literature typically focusses on the positive aspects of entrepreneurship, often portraying entrepreneurs as charismatic and even heroic leaders (Gupta et al., 2004; Williams and Gurtoo, 2013). Our findings suggest a more balanced view of entrepreneurship, highlighting its less desirable self-protective aspect, as well as its charismatic aspect. This is consistent with the multiple and often conflicting demands that entrepreneurs face. On the one hand they need to be co-operative so as to initiate change, which is facilitated by cultural support for charismatic leadership. On the other hand, they need to be to some degree self-protective and competitive in order to avoid being exploited – which is enabled by cultural endorsement of self-protective leadership. In this regard, the countries of South America may be considered prototypical entrepreneurial cultures. Although there are limitations to highlighting individual countries based on a multivariate, multi-level analysis, we note that all South American countries in our sample score high (i.e. above the sample mean) on both self-protective and charismatic leadership. They are also among the countries with the highest entrepreneurship rates in our sample. The other countries following this pattern are South Asian (Indonesia and Malaysia).

Self-protective and charismatic CLTs are statistically independent dimensions. Thus, each dimension on its own may also be beneficial for entrepreneurship. This allows, again very tentatively, to discern *further types of 'entrepreneurial cultures'* with relatively high entrepreneurship rates (above the sample mean, but typically lower than the cultures described above). Relatively high scores of self-protective leadership paired with lower charismatic leadership underlie the high rates of entrepreneurship in Asian countries such as China, India, South Korea and Thailand. Conversely, the relatively high entrepreneurship rates in countries such as Australia, Ireland, New Zealand and the USA are underpinned by a combination of high charismatic leadership with very low endorsement of self-protective leadership. Of the two Middle Eastern countries in the data set, Egypt shows the same pattern as the Asian cultures (relatively high self-protection/low charisma), while Turkey scores high on both leadership dimensions. Of course these observations are imperfect and there are exceptions. Yet, the clustering of countries and our statistical findings illustrate how valuable it is to consider self-protective leadership. It originates in non-Western concepts of leadership (House et al., 2004) and clearly differentiates an important set of entrepreneurial economies in South America, Asia and, tentatively, the Middle East. These would be overlooked, and their high entrepreneurship rates would remain poorly understood, if we had been solely focusing on the more 'Western' charismatic leadership concept.

Notably, these findings transcend the debate on whether cultural collectivism or individualism stimulates entrepreneurship. Self-protective and charismatic leadership each combine more individualistic traits (e.g., self-centric, competitive and proactive) with attributes that are more collectivist in nature (e.g., status-conscious, face-saving, and self-sacrifice). This highlights that elements of both individualism and collectivism are important for entrepreneurship (Tiessen, 1997). It also underscores that it is important to consider the more proximal concepts and mechanisms, such as CLTs, through which general cultural values influence entrepreneurship.

6.1.2. Advancing theorizing on culture in entrepreneurship

We advance theory by outlining which aspects of culture are relevant for entrepreneurship and how. In their review, Hayton and Cacciotti (2013) concluded that progress hinges on elucidating the mechanisms connecting culture and entrepreneurship, and on clarity about the type of construct used to measure culture – thus the 'how' and 'what' building blocks of theory. Drawing upon norm theory (e.g., Cialdini and Trost, 1998) allows us to differentiate the 'what', i.e. cultural values and practices. It also enables us to theorize about different mechanisms ('how') through which these constructs influence entrepreneurship. In particular, CLTs act as more proximal cultural influences on entrepreneurship compared with more distal general cultural values. Our findings support the notion that cultural values and practices impact entrepreneurship through different mechanisms - practices have a more direct effect on behaviors, while values exert a more indirect influence through other aspect of culture such as CLTs.

More specifically, we found that self-protective CLT partially mediated the effect of both cultural values (uncertainty avoidance and collectivism) and that charismatic CLT mediated the effects of collectivism. The weaker mediating effects for charismatic CLT may be due to the lower variation in charismatic compared to self-protective CLT across cultures. Our results are strengthened by the fact that mediation tests demand considerable statistical power (MacKinnon et al., 2007) and we were limited by our sample of 42 countries.

Furthermore, while CLTs mediated the influence of cultural values; this was not the case for cultural practices. That CLTs and cultural practices reflect distinct influencing mechanisms is also consistent with our additional findings (reported in Section 5.4).

The two CLTs showed incremental validity beyond cultural practices, i.e. they explained additional variation in entrepreneurship when uncertainty avoidance and collectivism practices were also included in the regression.

Taken together our findings advance but also complicate entrepreneurship research by highlighting that different aspects of culture have differential effects on entrepreneurship. While they help explain the mixed findings of past research on cultural values, they also call for future research, to carefully consider whether distal cultural values, more proximal leadership ideals, or cultural practices are the aspects of culture of interest for entrepreneurship. They caution against using measures such as Hofstede's indices, which intermix values and practices (Frese, 2015), and which thus may lead to conflicting findings.

6.1.3. Implications for the measurement of entrepreneurship

The mixed findings of past research on cultural values and entrepreneurship may in part be due to the use of different measures of entrepreneurship (pre-entry intention, nascent, new and established entrepreneurship, e.g., Bosma, 2013, Terjesen et al., 2013). Past research rarely considers these different measures jointly within one study as we do. From a methodological perspective, measures of entrepreneurial entry such as nascent and new entrepreneurship avoid survival bias. From a substantive perspective, studying different measures of entrepreneurship can offer insights into the process of entrepreneurship. It allows to separate, even if only imperfectly, predictors of propensity (intention) from those of entry (nascent/new) and those of the sustainability of entrepreneurial efforts (established entrepreneurship). The latter encompasses aspects of persistence, survival and success (Davidsson, 2016). Our findings replicated consistently across all these indicators. This supports the generalizability of our results, and underscores the importance of self-protective and charismatic CLTs as drivers of national differences in entrepreneurship.

It is not uncommon that predictors of one aspect of the entrepreneurial process also relate to success in another phase. For instance, related research on the individual-level finds that personality predictors of entry also predict persistence in entrepreneurship (Patel and Thatcher, 2014). We encourage future cross-national comparative research to consider multiple indicators of entrepreneurship and, if possible, also indicators of conversion from one phase to the next (Bergmann and Stephan, 2013). It is an opportunity to enhance the robustness of findings and offer insights into the entrepreneurial process.

6.2. Implications for cross-cultural leadership research

Our findings also add to the cross-cultural leadership literature. First, they newly demonstrate that CLTs relate to the creation of new firms; while past research solely considered the performance of existing firms (House et al., 2014). The effects of charismatic CLT are similar, but differ for self-protective leadership. The latter was negatively related to firm performance in past research, but we find a positive effect on entrepreneurship. Thus research into entrepreneurs may hold new insights for leadership research (see also Gorgievski and Stephan, 2016). Future research should explore whether entrepreneurs' self-protective behaviors may eventually become a hindrance to growing the firm, and how entrepreneurs may be able to manage this paradox.

Second, our robustness checks, in which we conducted a higher-order factor analysis of CLTs, contain a finding of interest to the cross-cultural leadership literature. We find that the six global CLTs form two factors. The first is self-focused, inward-oriented leadership (consisting of self-protective, autonomous, and non-participative CLTs), which is mostly negatively connoted across cultures. The second factor reflects other-focused, outward-directed leadership that is proactive, inspiring and relationship-building (consisting of charismatic, team-oriented, and humane-oriented CLTs). This factor is positively endorsed across cultures. These two higher-order leadership factors can help future research to circumvent the multicollinearity that results from the high correlations among the six global CLTs. They also help to overcome validity threats of low statistical power in country-level analyses usually involving smaller sample sizes.

Our study responds to calls for closer and fruitful integration of entrepreneurship and leadership research (Cogliser and Brigham, 2004). Such research is surprisingly scarce to date and largely limited to the firm-level (e.g., Hmieleski et al., 2012).

6.3. Limitations and future research directions

This study combined data from independent sources for the predictor and dependent variables, including large-scale population-representative surveys thereby minimizing common method bias. We also carefully considered the temporal ordering of variables. Data on all cultural predictor variables were gathered (1994–1997) before data on entrepreneurship (2001–2008). Although our study was correlational, its specific design makes causal inferences at least plausible. There are also further limitations.

First, we were limited by our data sources. Despite being able to include 42 countries in our dataset, countries from the Middle East and Africa were underrepresented.

Second, some researchers have criticized the measurement of values in the GLOBE study (Hofstede, 2006; Maseland and Van Hoorn, 2008). Hence replication of our findings using different cultural values indices would be desirable. Yet, unlike other cultural value data, the GLOBE data are more recent (i.e., 1999–1997), do not mix values and practices, and were carefully developed methodologically (e.g., theory-driven, building on qualitative pre-studies and verifying data aggregation to the country-level, Hanges and Dickson, 2004).

Third, we hypothesized about legitimacy- and motivation-based effects of CLTs on entrepreneurship. We could not measure these more micro-level influences. This constraint arose from using secondary, large-scale population-representative data. We

hope that future research may be able to design adequate measures capturing, for instance, how others react to entrepreneurs. It may also be useful to test such mechanisms in experiments using priming procedures and vignettes to induce cultural values and CLTs.

Fourth, we argued that cultural leadership expectations are more proximal aspects of culture than are general cultural values. We hope future research can develop even more specific measures to assess culturally shared implicit theories of entrepreneurs. Future research using the GLOBE CLTs dimensions could also explore whether the positive effects of charismatic and self-protective CLT hold for different types of entrepreneurs. For instance, in a recent country-level study, Bullough and Luque (2015) find a positive effect for charismatic but not self-protective CLT on a country's share of women in self-employment.

Finally, we recognize that transformational-charismatic leadership has been criticized for lack of conceptual accuracy (Knippenberg and Sitkin, 2013). By contrast, the measure used in this study is well specified as visionary and value-based charismatic leadership. Self-protective leadership was introduced by GLOBE as a non-Western style of leadership (Brodbeck et al., 2008; Dorfman et al., 2004). We know very little about the consequences of self-protective leadership. We hope this study can help to inspire more research on it.

6.4. Practical implications

Our study has important implications for entrepreneurs and those wishing to promote entrepreneurship (e.g. educators, support organizations and policy makers). Leadership ideals are more malleable than cultural values. Hence, considering CLTs opens up new possibilities for practical interventions. Entrepreneurs would benefit from being aware of which CLTs are endorsed in their culture, enabling them to take account of others' (including their stakeholders') expectations of them. They would further benefit from understanding how their own attributes compare to widely endorsed CLTs. Entrepreneurs' own implicit leadership theories can be discussed through reflection exercises (Schyns et al., 2011) supplemented by discussion of a culture's CLT (as available in House et al., 2004, 2014). Training could further focus on strategies to align entrepreneurs' behaviors with their culture's expectations towards leaders. Such training could explain the benefits of this alignment including increased legitimacy and ultimately start-up success.

Considering that charismatic leadership is widely endorsed across cultures, entrepreneurship training could incorporate role modelling charismatic behaviors. With regard to self-protective leadership, training should highlight that self-protective behaviors, which are important for competitiveness, are often viewed negatively by others. Such training would need to be tailored for specific cultures because the relative acceptance of self-protective leadership varies greatly across cultures. For entrepreneurs who intend to internationalize or work across borders, training should compare and contrast the CLTs held in both home and host cultures. Particularly so if those cultures differ markedly in their endorsement of charismatic and self-protective CLTs (e.g., France vs. Brazil).

7. Conclusion

Entrepreneurs are an important type of strategic leader. We integrate insights from leadership theory and propose Culturally-endorsed implicit Leadership Theories (CLTs) as a fresh perspective to advance comparative entrepreneurship research. We find strong and consistent effects of CLTs on individual entrepreneurship. These highlight that entrepreneurs thrive in cultures that do not merely strongly endorse desirable charismatic leaders, but are also able to tolerate at least some of the less desirable self-protective leadership behaviors. Our study refines theorizing on culture and entrepreneurship by considering both distal and proximal cultural determinants of entrepreneurship, as well as cultural values and practices. It contributes to a better understanding of the mechanisms through which cultural values influence entrepreneurship.

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